# Syllabus for CSC 230: Programming Concepts and GUIs (Spring 2020)

Contact Information:

Thomas E. Blum Office: Holroyd-133 (but am often in Holroyd 124) Office Hours: Mon. 10:30 - 11:30 (Holroyd 133 or Holroyd 124) Tues. 3:30 - 4:30 Wed. 10:30 - 11:30 (Holroyd 133 or Holroyd 124) Thurs. 3:30 - 4:30 (Holroyd 133 or Holroyd 124) Or by appointment Phone: 215.951.1139 e-mail: blum@lasalle.edu Web: http://www1.lasalle.edu/~blum Department office: Holroyd 123 Department phone: 215.951.1130

#### Topics:

This course addresses problem solving and programming using problem-based learning; variables, control flow, iteration, modules, arrays, file processing, classes, and objects; and basic graphical-user interface concepts (forms/pages and controls) for desktop and/or Web or mobile environments. The course consists of three hours of lecture and two hours of laboratory per week.

Section: 01

Credits: 4

Meetings:

Monday, Wednesday, Friday 9:30-10:20 in Holroyd 155 Tuesday 9:00-10:45 in Holroyd 153

Holidays: MLK: Mon, Jan. 20

Spring break: March 16 - 20 Easter: Fri. Apr. 10 & Mon. Apr. 13

Other important dates: Classes start: Jan 13 Midsemester grades due: Mar. 4 Last day to withdraw: Mar. 30 Classes end: May 1 Finals week: May 4 - 7 Course Calendar Link: http://www1.lasalle.edu/~blum/c230-cal-s20.htm

## Text: None

## W3 Schools Websites:

- <u>https://www.w3schools.com/html/html5\_intro.asp</u> (HTML5)
- <u>https://validator.w3.org/</u> (HTML Validator)
- <u>https://www.w3schools.com/css/</u> (CSS)
- <u>https://jigsaw.w3.org/css-validator/</u> (CSS Validator)
- <u>https://www.w3schools.com/js/</u> (JavaScript)
- <u>https://www.w3schools.com/js/js\_json\_intro.asp</u> (JSON)
- <u>https://www.w3schools.com/xml/ajax\_intro.asp</u> (AJAX)

# Learning Objectives:

Students should be able to:

- Design and implement an HTML page with JavaScript facilitated interactivity, such as retrieving input from a user and changing the page's content or style in response.
- Apply control structures (such as if-else, try-catch, switch, for, while, timer).
- Analyze a situation and then select and implement the appropriate programming logic.
- Construct programming array structures.
- Choose appropriate string methods (including parsing) to implement solutions.
- Design, create and use a class.
- Read data from a JSON file.
- Use some elements of a JavaScript library (e.g. Vue, React, Angular).

## Assessment:

There will be a weekly lab as well as a weekly homework. There will be three open-book, opennotes exams in which you will write code and a final of the same format. The various components of the course will be weighted as follows:

Homework: 20% Lab/Class: 20% Tests: 30% (lowest dropped) Final: 30% or if it benefits the student Homework: 20% Lab/Class: 20% Tests: 45% (no drop)

- Final: 15%
- The plus/minus grading system will be used.
- Attendance will be taken.

- Absences, lateness, inattention, etc. will be factored into the lab/class component of the grade.
- Over three unexcused absences may result in the reduction of your final grade.
- One can email solutions provided that they are compressed or post them and send me the link.
- Homework and lab assignments are due a week after they are assigned. Labs and homework assignments submitted after the test on the relevant material will not be eligible for full credit.
- The lowest of the three test grades will be dropped. The final has a weight equal to two tests. If the final is the lowest grade, it will be counted equal to a test and no test grade will be dropped.
- Make-up tests are given at the discretion of the professor. If you miss a test, you should assume it will serve as your dropped score unless you have met with me to discuss the reason for missing the exam and to schedule a make-up.
- All tests are cumulative, though they will tend to focus on and give more weight to the new material.
- It is your responsibility to keep copies of all of your assignments, tests and so forth at least until you receive your final grade for the course.

## Grading scheme:

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А	94 <= average
A-	91 <= average < 94
B+	88 <= average < 91
В	85 <= average < 88
B-	82 <= average < 85
C+	79 <= average < 82
С	76 <= average < 79
C-	73 <= average < 76
D+	70 <= average < 73
D	67 <= average < 70

## Classroom Behavior:

While in the classroom, students should behave in a manner that is neither distracting to nor disrespectful to the professor or other students.

## Cheating:

When using materials from a book, website, etc., the source must be cited, otherwise it is considered plagiarism. Claiming another's work as your own is cheating. A student caught cheating will receive a score of zero. Repeated cheating can result in a failing grade for the course. Asking another for help on a step or two in a many step homework or lab is acceptable; handing in duplicate or nearly duplicate work is not. If you require a significant amount of assistance, you should seek my help. Finally, openly allowing your work to be copied is also cheating.

https://www.lasalle.edu/students/dean/divpub/manuals/studentguide/index.php?accordion\_num=2&v n2\_accordion\_num=4&content=policies&anchorID=inte (Academic Integrity Policy) <u>https://www.lasalle.edu/students/dean/divpub/manuals/studentguide/index.php?accordion\_num=2&v</u> <u>n2\_accordion\_num=4&content=policies&anchorID=dish</u> (Academic Dishonesty)

#### Some Tutoring:

Tutoring for various subject areas (70+ courses) is available for La Salle undergraduates. Subject tutors help students identify what as well as how to learn, clarify course content, and help students understand their strengths and weaknesses regarding the subject matter. Students should take advantage of tutoring at the first indication of difficulty in a course or whenever they wish to improve their performance or knowledge in a course, for example, to improve grades or to maintain high grades. Students can make tutoring appointments through GradesFirst located under Tools in the mylasalle portal. For students who have created their own study groups but would like a tutor to assist the group with the material, "facilitated study groups" can be arranged.

The Department of Mathematics and Computer Science sometimes has "walk-in" computer science tutoring available. If available the time and place will be announced.

#### Academic Skills Workshops:

Academic Skills Workshops are offered on a variety of topics such as study strategies, documentation styles, test taking, group study, and time management. <u>https://www.lasalle.edu/academiclearningsupport/</u> Additional academic resources are available online as well. For more information, contact Melissa H Gallagher at 215.951.5115 or hediger@lasalle.edu

#### Student Resources:

https://lasalle.instructure.com/courses/1772 includes links to

- Student Guide on how to use Canvas
- Student Guide to Resources, Rights and Responsibilities
- Academic Integrity Policy
- American Disabilities Act
- IT Help Desk Support
- Academic and Learning Support Services
- Library Resources in Canvas
- Library